

**CHAPTER 222
ELECTRICAL AND ELEVATOR CODES**

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SUBCHAPTER 1
ELECTRICAL INSTALLATIONS

222-01. Adoption of State Code. Except as otherwise provided in this chapter, the city of Milwaukee adopts chs. Comm 16 and 18, Wis. Adm. Code, as amended, as part of this code.

222-02. Scope. The object and purpose of this chapter is to safeguard persons and property from hazards arising from the use of electrical energy by establishing minimum standards for the installation and maintenance of electrical systems. The standards do not constitute a specification for electrical installations and electrical equipment generally.

222-1. Regulations. 1. WHEN APPLICABLE. Except as regulated in sub. 2, the regulations of this chapter shall apply to the supply of electricity and to all sales, rentals, leases, uses, installations, alterations, repairs, removals, renewals, replacements, disturbances, connections, disconnections and maintenance of all electrical materials, wiring, conductors, fittings, devices, appliances, fixtures, signs, and apparatus, or parts thereof, or attachments therefor, hereafter referred to as electrical equipment, which are intended to be, or are, within, on, under, over, or near all buildings, structures, equipment and premises.

2. EXCEPTIONS. The electrical license and permit regulations of this chapter shall not apply to the following:

a. The installation, alteration or repair of electrical generation, transmission or distribution equipment, but not utilization equipment, owned and operated by an electrical public utility company or the city.

b. The installation, alteration or repair of signal or communication equipment where such equipment is owned and operated by a public utility company or the city.

c. Any work in ships, railway cars, buses, aircraft, automobiles, trailers and trailer houses.

d. Any work in connection with electrical equipment used for radio and television transmission, but not including supply wires to such equipment.

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e. Any work involved in the manufacturing or testing of electrical equipment or apparatus, but not including any permanent wiring or equipment.

f. Any work associated with:

f-1. The repair of plug-connected electrical appliances or devices.

f-2. Permanently connected electrical appliances or devices which have been electrically and mechanically disconnected and separated from all sources of electrical supply by an electrical licensee. The opening of switches or the blowing or removal of fuses shall not be considered as electrical or mechanical disconnection or separation.

g. The installation or replacement of approved fuses which are not oversize for the circuit involved.

222-2. Enforcement. 1. The commissioner or his duly authorized representative shall enforce this chapter.

2. The commissioner in special cases may waive any of the regulations of this chapter, the enforcement of which in the commissioner's judgment would create an unsafe or dangerous condition.

3. The police and fire departments shall assist the commissioner or any of his duly authorized representatives in the enforcement of this chapter, and permit and allow the commissioner or his representatives inside fire and police lines.

4. No person may impersonate the commissioner or his duly authorized representative to enforce or try to enforce any of the regulations in this chapter.

5. Every person who furnishes electrical current to, or who owns, sells, leases, or lets for hire, uses, designs, installs, repairs, operates, maintains, or grants possession of any electrical equipment or materials, wiring, or apparatus in the city shall comply with the regulations of this chapter.

222-3. Interpretation. Pursuant to s. 200-33 the commissioner shall have the authority to render interpretations of the regulations of this chapter.

222-4. Right of Entry. 1. Pursuant to s. 200-12, the commissioner or his duly authorized representative may enter all buildings and premises and all parts thereof,

except occupied dwellings, in order to make an inspection, reinspection, observation, examination, or test of the electrical equipment or wiring contained therein or thereon to enforce the regulations of this chapter.

2. No person may refuse lawful entry to the commissioner or his duly authorized representative, or interfere with, harass, abuse, obstruct or cause delay in the performance of their duties. The commissioner or his duly authorized representatives may order the removal of any and all obstructions including lath, plaster, lumber, boards and partitions.

222-5. Inspections. Upon the completion of any installation, alteration or replacement of electrical equipment which requires a permit, it shall be the duty of the licensee making the installation, alteration or replacement to notify the commissioner, who may inspect the installation, alteration or replacement as soon thereafter as practicable. When any electrical equipment requiring a permit is to be concealed by the permanent placement of parts of the building, the licensee installing the electrical equipment shall notify the commissioner to that effect, and such equipment shall not be concealed by the person installing such parts of the building until after it has been inspected and approved by the commissioner. On installations where the concealment of electrical equipment proceeds continuously, the licensee installing the electrical equipment shall give the commissioner due notice and inspection shall be made periodically during the progress of the work.

222-6. City Not Liable. This chapter shall not be construed to relieve from or lessen the responsibility or liability of any person supplying electricity to, or selling, or renting, or leasing, owning, using, operating, controlling, installing, altering, repairing, removing, replacing, disturbing, connecting, disconnecting, or maintaining any electrical equipment, for damages to persons or property caused by any defect therein or therefrom; nor shall the city be held as assuming any such responsibility or liability by reason of the issuance or revocation

of any license or permit, or the inspection or reinspection authorized by this chapter, or by reason of the approval or disapproval of any electrical equipment, sales, rentals, drawings, plans, specifications, materials, samples, test reports, literature, information or schedules authorized in this chapter. Nor shall the city be held liable for any damages resulting from the enforcement of this chapter.

222-7. Commissioner Not Liable. In all cases where any action is taken by the commissioner to enforce the regulations of this chapter, such action shall be considered as done in the name of and on behalf of the city. The commissioner, in so acting for the city, shall not be judged as liable for any damage that may accrue to persons or property as a result of any such action committed in the discharge of the commissioner's duties. Any lawsuit or action brought against the commissioner relating to the commissioner's enforcement of the regulations of this chapter shall be defended by the city attorney until final termination of the proceedings contained therein.

222-8. Complaints. Complaints on improper or defective electrical equipment shall be investigated and action shall be taken as regulated in s. 222-20. Where complaints disclose inadequacy of electrical equipment, the commissioner shall notify the owner of the premises, in writing, to that effect.

222-9. Information. 1. All requests for information pertaining to and involving an interpretation of this chapter shall be submitted in detail to the commissioner.

2. The commissioner shall not design or lay out any electrical installation or act in the capacity of a consulting electrical engineer.

222-10. Records. The commissioner of city development shall keep a record of all electrical permits and other electrical matters as regulated in s. 222-13.

222-11. Electrical Licenses. 1. TYPES. There are established 3 types of electrical licenses as follows:

a. Type C electrical contractor's license. This license authorizes the holder to obtain electrical permits for any work regulated by this chapter.

b. Type M electrical maintenance license. This license authorizes the holder to obtain electrical permits for repair and replacement work regulated by this chapter.

c. Type E elevator electrical contractor's license. This license authorizes the holder to obtain elevator permits for work regulated by this chapter.

2. LICENSE REQUIRED. No person shall install, alter, repair, remove, renew, replace, disturb, connect, disconnect or maintain any electrical equipment or accept any payments therefor in the city without first having procured the proper license or a renewal as regulated in this section, except a person who is performing such work as a bona fide employee of and the holder of proper license, or is performing work on electrical equipment exempt under s. 222-1-2.

3. CONTRACTS. A contract to install, alter, repair, remove, renew, replace, disturb, connect, disconnect or maintain electrical equipment may be entered into by a person who does not hold any of the licenses regulated in this section, provided such fact is made known to all parties concerned and the actual work is performed by a holder of a license as required herein. A person selling electrical work shall be licensed in accordance with s. 95-14.

4. QUALIFICATIONS FOR LICENSES. a. Type C License. An applicant for a Type C electrical contractor's license or renewal thereof shall comply with ch. Comm 5, subch. IV, Wis. Adm. Code, as amended, or shall submit an affidavit to the effect that a person holding state master electrician certification will be a bona fide full-time employee of the applicant, and that such master electrician certificate holder will have complete and unquestionable authority and supervision over all work regulated by this chapter.

b. Type M License. An applicant for a Type M electrical maintenance license or renewal thereof shall comply with ch. Comm 5, subch. IV, Wis. Adm. Code, as amended, or shall submit an affidavit to the effect that a person who has completed a certificate program or associate degree program at an accredited college or technical school in a field directly related to electrical installations or wiring, or a state of Wisconsin apprenticeship program in the same field, will be a bona fide full-time employee of the applicant, and that such person will have complete and

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unquestionable authority and supervision over the electrical maintenance and repair work in the building or structure (plant) of the employer.

c. Type E License. An applicant for a Type E elevator electrical contractor license or renewal thereof shall comply with ch. Comm 5, subch. IV, Wis. Adm. Code, as amended.

5. LICENSING PROCEDURE.

a. Applications. All applications for electrical licenses shall be made to the commissioner on forms furnished for such purpose.

b. Type C License. The commissioner shall review and approve or disapprove the license or license renewal application. In the case of approval, the commissioner shall issue a Type C electrical contractor license permitting the licensee to install, alter, repair, remove, renew, replace, disturb, connect, disconnect or maintain any electrical equipment and accept payment therefor. Before such license or renewal is issued, the applicant shall have on file with the commissioner a certificate of insurance as required in sub. 10 and pay the license fee required by s. 200-33.

c. Type M License. The commissioner shall review and approve or disapprove the license or license renewal application. In the case of approval, the commissioner shall issue a Type M electrical maintenance license permitting the licensee to maintain and keep in a good state of repair, or to replace, all existing electrical equipment solely within the building or structure (plant) in which the licensee is employed. In no case, however, shall the licensee be permitted to install or construct any additional electrical equipment. All equipment replacement shall require permits and the payment of permit fees in the amounts specified in s. 200-33. Before a Type M license is issued or renewed, the applicant shall pay the license fee required by s. 200-33.

d. Type E License. The commissioner shall review and approve or disapprove the license or license renewal application. In the case of approval, the commissioner shall issue a Type E elevator electrical contractor license permitting the licensee to install, alter, repair, remove, renew, replace, disturb, connect or disconnect, or maintain any elevator electrical equipment in

the city and accept payment therefor. This shall include the wiring from the control mechanism switchbox and all electrical circuits required for cab lights, signals and motors that pertain to elevator installations. Before a Type E license is issued or renewed, the applicant shall pay the license fee required by s. 200-33.

e. Address to Be Provided. At the time of application for a new or renewal electrical license, the applicant shall provide the commissioner with the current street addresses of the applicant's business and the applicant's place of residence. Provision of a post office box number shall not be considered adequate to satisfy this requirement. If either of these addresses changes during the course of the license year, the licensee shall provide written notice of the change to the commissioner within 10 working days of the date on which the change is effective.

6. NOT TRANSFERABLE. No license issued under this chapter shall be assignable or transferable, and no license shall be used by persons other than to whom issued.

7. RENEWALS. No renewal of any license shall be granted until the applicant has fully complied with this chapter. All licenses and renewals shall expire on August 31. No prorated licenses or license fees shall be permitted. Whenever a license is allowed to lapse due to the licensee's failure to renew the license prior to the expiration date, a new license will be issued only upon submission of an application for a new license, satisfactory compliance with the requirements for a new license and payment of the fee for an original license.

8. TERMINATION. In the event that the full-time services of a supervising electrician are interrupted or terminated, the holder of the license shall immediately notify the commissioner in writing and the license shall become null and void immediately upon such notification. The licensee shall cease to perform electrical work until a new application and affidavit are filed, as required by subs. 4 and 5, and a new license is issued, except that no additional license fees shall be paid within the same license year.

9. PROCEDURES FOR NONRENEWAL, SUSPENSION OR REVOCATION. a. Charges or Complaint. Whenever any person, including the commissioner, files either sworn written charges or a sworn written complaint with the commissioner alleging that one or more of the conditions for nonrenewal, suspension or revocation of a license specified in par. e have occurred, and the commissioner determines that the existence or occurrence of this condition, if proven, would warrant nonrenewal, suspension or revocation of the license, the commissioner shall notify the standards and appeals commission of the charges or complaint. The notice shall include the commissioner's recommendation for nonrenewal, suspension or revocation of the license. Within 45 days of receipt of the notice from the commissioner, the commission shall hold a hearing to determine if there is cause for nonrenewal, suspension or revocation of the license. Written charges relating to renewal of a license shall be filed no later than 60 days prior to the expiration of the license.

b. Notice of Nonrenewal of License. In the case of a hearing regarding possible nonrenewal of a license, the commissioner shall send written notice of the date, time and place of the hearing to the licensee by United States first class mail. The notice shall be sent to the last known address of the licensee as identified by the records of the commissioner. A copy of the charges or complaint shall be included with the notice. The notice shall state that the licensee has the right to appear at the hearing to present witnesses and evidence on his or her own behalf refuting the charges or complaint. The notice shall also state that the licensee has the right to appear with counsel at the hearing and that both the licensee and the licensee's counsel have the right to cross-examine witnesses.

c. Suspension or Revocation; Complaint; Summons. c-1. Whenever either sworn written charges or a sworn written complaint are filed with the commissioner alleging that one or more of the conditions for suspension or revocation of a license specified in par. e have occurred, the commissioner shall issue a summons demanding that the licensee appear before the standards and appeals commission, at the hearing scheduled pursuant to par. a, to show cause why the license should not be revoked or suspended.

c-2. A sheriff of the county of residence of the licensee shall serve the summons upon a licensee or agent of a corporate licensee and shall also serve a copy of the complaint with a copy of this subsection upon the licensee.

d. Commission Hearing. d-1. The commission shall convene at the date and time specified in the hearing notice or summons for the purpose of taking evidence and making findings of fact, conclusions of law and a decision to affirm, reject or modify the commissioner's recommendation for nonrenewal, suspension or revocation of the license.

d-2. If the licensee appears before the commission at the time designated in the notice or summons and denies the charges contained in the complaint, an evidentiary hearing in connection with the nonrenewal, revocation or suspension shall be conducted by the commission at that time. If the licensee does not appear, or appears but does not deny the charges contained in the complaint, the complaint shall be taken as true and the commission shall hear the arguments of the commissioner and the licensee in connection with the nonrenewal, suspension or revocation.

d-3. At any evidentiary hearing required by this subsection, the commissioner shall first present evidence in support of the complaint. After the commissioner rests, the licensee shall present evidence in opposition to the complaint. Each may subpoena witnesses. All witnesses shall testify under oath and shall be subject to cross-examination under oath. At the close of the testimony, each shall be given a reasonable time to make arguments upon the evidence adduced at the hearing.

d-4. The chair of the commission shall be the presiding officer. The chair shall direct that oaths be administered and subpoenas issued upon request of either side. The chair shall ensure that an orderly hearing is conducted in accordance with the requirements of this subsection. The chair shall rule on objections to the admissibility of evidence. Any ruling of the chair shall be final unless appealed to the commission, and the commission shall reverse such ruling only upon the vote of a majority of its members.

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d-5. At all stages of the proceedings before the commission, the licensee shall be entitled to appear both in person and by an attorney. The commissioner shall also be entitled to appear both in person and by the city attorney.

d-6. A stenographic record shall be made of all proceedings before the commission when written exceptions have been filed. Any interested party may at any stage of the proceedings order a copy of the transcript of the record or portions thereof at his or her own expense.

e. Grounds for Nonrenewal, Suspension or Revocation. The commission may deny renewal of, suspend for not more than 60 days, or revoke an electrical license only if it finds that any of the following have occurred:

e-1. The licensee has violated any provision of this chapter or of ch. Comm 16 or ch. Comm 18, Wis. Adm. Code.

e-2. The licensee has demonstrated incompetence in the performance of any electrical work regulated by this chapter.

e-3. Within the past 5 years, the licensee has been convicted of any felony offense the circumstances of which substantially relate to the circumstances of the licensed activity.

e-4. The licensee has performed electrical work for which a permit is required without a valid permit issued by the department.

e-5. The licensee has performed electrical work without having a currently valid license for that type of work.

e-6. The licensee has obtained a permit or license on behalf of another person to allow that person to perform electrical work.

f. Commission Report and Decision. Within 10 working days after it reaches a decision, the commission shall prepare a written report and decision on the proposed license nonrenewal, suspension or revocation and transmit copies thereof to the city attorney, the commissioner and the licensee. The report and decision shall include specific findings of fact and conclusions of law made by the commission.

g. Effective Date of Suspension or Revocation. Any suspension or revocation shall be effective upon service of a copy of the commission's report and decision to the licensee.

h. Limitation on Issuance of New License. In the case of a license nonrenewal or revocation, no new electrical license shall be issued to the former licensee for a period of 3 years following the expiration date of the prior license or the effective date of the revocation, as the case may be.

i. Appeal of Commission's Decision. A decision of the commission for nonrenewal, suspension or revocation of an electrical license may be appealed to the circuit court of Milwaukee county by writ of certiorari. If the court finds that the commission erred in its decision because it failed to afford due process to the licensee or because its decision was not reasonable based on the evidence provided, it may remand the matter to the commission for reconsideration.

10. EXISTING LICENSES. All persons or firms holding Type C electrical contractor licenses, Type M electrical maintenance licenses and Type E elevator electrical contractor licenses as of January 1, 2003 shall continue to be licensed under the provisions of this section. Where a licensee possesses a Class 1 master electrician's certificate or a Class 2 maintenance electrician's certificate of qualification, as provided for in this chapter prior to January 1, 2003, the licensee shall be considered eligible for a license, even if the licensee does not meet the qualifications of sub. 4.

11. INSURANCE. a. Except as regulated in par. d, it shall be unlawful for any person to engage in the work of electrical contracting or to obtain a license as an electrical contractor without first having executed and deposited with the commissioner a certificate of general liability and property damage insurance in the sum of not less than:

a-1. \$10,000 per person.
a-2. \$20,000 per accident for bodily injury liability.

a-3. \$5,000 property damage liability.
b. The certificate of insurance shall

be in the form designated by the commissioner and shall be approved by the commissioner as to the sufficiency of surety, with the form and execution to be approved by the city attorney.

c. The insurance certificate issued pursuant to this subsection shall apply to the same period for which the license is issued and shall provide that the licensee will give 10 days' notice to the commissioner of cancellation, expiration or intent not to renew; otherwise, such insurance shall continue in full force and effect.

d. This subsection does not apply to self-insured companies, industries or governmental agencies approved by the commissioner and the city attorney, such as, but not limited to, the following:

d-1. Companies or industries regulated under ch. 196, Wis. Stats.

d-2. Agencies of the federal, state, county or municipal government.

222-13. Permits. 1. PERMIT REQUIRED. Except as regulated in s. 222-1-2 and subs. 4 and 5, no electrical equipment shall be installed, altered, renewed, replaced or connected without first procuring a permit.

2. APPLICATIONS FOR PERMIT.

a. Any holder of a Type C, Type M or Type E license desiring a permit as required by this chapter shall file with the commissioner of city development an application for such permit in writing on a form furnished for such purpose. Such application shall be signed by the supervising electrician of the applicant's business.

b. Such application shall describe and enumerate the electrical equipment to be installed and shall give other reasonable information as may be required by the commissioner of city development.

c. At the time of an issuance of a permit, the commissioner of city development may require the manufacturer, owner, installer or user of electrical equipment to submit plans (drawings), data, and specifications, schedules or literature, information, materials, samples or tests as may be necessary to determine the fitness of equipment for safe installation and use.

d. The approval of general building plans and specifications by the commissioner of city development shall not be considered as including electrical plans or specifications or electrical equipment.

3. ISSUANCE OF PERMIT. a. If upon examination it is found that the information on the application is complete, the commissioner of city development shall issue a permit; provided that the licensee agrees and expressly states that he is fully capable, and in possession of knowledge and ability to design, lay out, install, alter or replace the work designated in the application in accordance

with this chapter, and with all other laws and ordinances pertinent thereto, and will install electrical equipment as described in the application for permit in a safe, legal and workmanlike manner.

b. The issuance of any permit or the serving of any notice or order shall not preclude compliance with all ordinances or other laws relating to occupancy and use, construction (s. 200-26) or zoning (ch. 295).

c. No other electrical work shall be done except work as described in the application for permit.

4. ONE OR 2 - FAMILY RESIDENTIAL AFFIDAVIT APPLICATION. a. The department of city development may allow any Type C licensed electrical contractor to submit a residential affidavit application. The application shall contain the signature of the supervising electrician certifying that the covered repair, replacement, fished or exposed installation of electrical equipment conforms to all existing state and local laws, ordinances and regulations and that all work described on the application has been completed and performed in a safe, legal and workmanlike manner.

b. The residential affidavit application shall allow a Type C licensed electrical contractor to perform any 2 of the following repairs, replacements or installations at any one address in a 12-month period:

b-1. Outlet for fixture, lamp, switch or receptacle.

b-2. Fixture replacement (total maximum of 5).

b-4. Motor, including disconnecting means (furnace, exhaust fan, etc.).

b-5. Water heater.

b-6. Dryer or dryer outlet.

b-7. Air conditioner, including disconnecting means or air conditioner outlet.

b-8. Range or range outlet.

b-9. Garbage disposal, including disconnecting means.

b-10. Dishwasher, including disconnecting means.

5. LOW VOLTAGE AFFIDAVIT APPLICATION. a. The department of city development may allow any Type C licensed electrical contractor to submit an affidavit application. The application shall contain a signed statement by the supervising electrician certifying that the installation of electrical equipment conforms to all existing state and

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local laws, ordinances and regulations, and that all work described on the application has been completed and performed in a safe, legal and workman-like manner.

b. For systems of less than 120 volt nominal, the following tables shall apply:

NON-RESIDENTIAL, LESS THAN 120 VOLT NOMINAL

Type of System	Permit	Affidavit*
Machine control	X	
Permanent lighting	X	
Permanent receptacle	X	
Pathway lighting,		
hard-wired transformer	X	
Solar photo voltaic system	X	
Fire alarm with optionals	X	
Smoke detector	X	
Sprinkler alarm	X	
Intercom system, hard-wired		X
Burglar alarm, hard-wired		X
Security system,		
hard-wired transformer		X
Energy management system	X	
A.D.A. requirements	X	
Emergency lighting	X	

* Affidavit by licensed electrical contractor (see par. a.)

MULTI-FAMILY RESIDENTIAL (3 OR MORE UNITS), LESS THAN 120 VOLT NOMINAL

Type of System	Permit	Affidavit*
Permanent lighting	X	
Hard-wired transformer,		
primary-secondary	X	
Pathway lighting,		
hard-wired transformer	X	
Solar photo voltaic system	X	
Fire alarm with optionals	X	
Smoke detector	X	
Sprinkler alarm	X	
Intercom system, hard-wired		X
Burglar alarm, hard-wired		X
Security system,		
hard-wired transformer		X
Energy management system	X	
A.D.A. requirements	X	
Emergency lighting	X	

* Affidavit by licensed electrical contractor (see par. a.)

6. WORK WITHOUT PERMIT. When any work is begun on the installation, alteration, or replacement of any electrical

equipment without first obtaining a permit therefor, except as provided in sub. 4, the commissioner shall have the power and authority to disconnect or order the disconnection immediately of any such equipment and to stop such work until a permit has been procured.

7. NO PERMITS TO VIOLATORS.

a. Whenever any electrical installation occurs contrary to the regulations of this chapter, the commissioner shall issue a notice to remedy the defective work to the violator at his or her last known address. Failure to comply with the notice shall be deemed sufficient reason for withholding future permits, in addition to other penalties provided in this code.

b. The following shall also be deemed sufficient reasons for withholding future permits:

b-1. An unreasonable delay in the performance of electrical work occurs after issuance of a permit.

b-2. An electrical contractor fails to promptly respond to official communication from the commissioner.

8. EXPIRATION OF PERMITS. If any electrical work for which a permit has been issued is not started within 6 months from the date of issuance of the permit, or if any electrical work for which a permit has been issued ceases for more than 6 months, such permit shall lapse and be void, and all permit fees shall remain the property of the city. No electrical work shall begin or be resumed until a new electrical permit is obtained and the fees prescribed in s. 200-33 are paid therefor.

222-15. Installation Standards. 1. The commissioner of city development may grant special permission, for a limited period of time, for the installation or use of temporary electrical wiring and equipment which do not conform with the regulations of this chapter. The electrical contractor installing such wiring or equipment shall be directly and legally responsible and accountable for the safe condition of the installation at all times, and its complete removal at the end of the fixed temporary period, as set forth by the commissioner of city development or any time sooner when ordered by the commissioner of city development. Carnivals, circuses, theatrical acts, and exhibitions and all places of temporary outdoor assembly are included in the

provisions of this subsection, and all electrical wiring and equipment associated therewith shall be installed, maintained, and operated in a safe and workmanlike manner. All such electric wiring and equipment shall be isolated from the public by proper elevation and guarding and all electric fuses and switches shall be installed in approved enclosures. Cable laid on the ground in areas traversed by the public shall be buried in trenches or protected by approved covers.

2. The wiring in electrically operated machinery, appliances, devices, and similar equipment, and the wiring in display counters, showcases, backbars, booths, and similar fixtures shall not be required to conform to the wiring regulations for buildings, but shall be subject to the approval or disapproval of the commissioner of city development as regulated in ss. 222-17 to 222-19.

3. Existing electrical equipment which does not conform to the regulations of this chapter, but which was lawfully installed prior to the passage of this chapter, may be continued in use if maintained in a safe condition.

4. When any additions, alterations, or renewals of existing electrical equipment lawfully installed prior to the adoption of this chapter are made, such portion of the installation which is added, altered or renewed shall conform to the regulations of this chapter.

5. Any change in the occupancy or use of an existing building, structure or premises shall not require a change in the existing electric equipment, provided such change does not create an electric hazard.

222-16. Connections to Installations. It shall be unlawful for any person to make any connection from any source or supply of electricity, or to supply electricity to any electrical equipment for which a permit is required, or which has been disconnected or ordered disconnected by the commissioner, until a certificate of authorization has been issued by the commissioner of city development authorizing the connection and use of such equipment.

222-17. Approval of Electrical Equipment. 1. It shall be unlawful for any person to sell, install or use any type or kind of electrical equipment which has not been approved.

2. The sale, rental, installation or repair of electrical equipment shall by implication warrant that the manufacturer, seller, installer, repairer or person receiving payment for rental therefor, guarantees that such electrical equipment is of merchantable quality and not defective to the extent that it will be dangerous to persons or property when put to the use for which it was designed.

3. It shall be the policy of the commissioner of city development to approve, subject to the regulations of this chapter, any type or kind of electrical equipment which has been approved by the National Bureau of Standards or any nationally recognized testing laboratory or the state of Wisconsin.

4. A list or record of all such approved electrical equipment shall be kept in the office of the commissioner of city development and shall be accessible to the public during regular office hours.

222-18. Installation of Electrical Equipment.

Except as otherwise regulated in this chapter, all electrical equipment which has been expressly made for electrical purposes shall be installed or used in the exact manner and for the exact purpose indicated by the manufacturer's instruction, markings or labels. Old or secondhand electrical equipment shall not be installed unless such equipment is in a safe condition and approved. Approved electrical equipment and the original manufacturer's ratings, markings or labels thereon shall not be changed or altered in any manner, except that normal replacements and repairs may be made to such equipment if the replacements and repairs do not change the original characteristics or design.

222-19. Unsafe or Illegal Electrical Equipment.

1. When the commissioner finds any electrical equipment to be unsafe or dangerous to persons or property, the person owning or using such electrical equipment may be issued an order in writing by the commissioner to remove or cause to be removed or to make any changes or repairs as determined by the commissioner so as to restore the electrical equipment to a safe condition. Failure to comply with the order within the time specified in such notice shall be sufficient cause for the commissioner to disconnect or order the removal of, or order the discontinuance of electrical service to the

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electrical equipment, or to cause the arrest of such person owning or using such electrical equipment.

2. In any case of emergency affecting the safety of persons or property, or where electrical equipment interferes with the work of the fire department, or where electrical equipment is not installed in conformity with this chapter, the commissioner may disconnect immediately or cause the removal or disconnection of any such electrical equipment.

3. When the commissioner disconnects or causes to be disconnected electrical current from electrical equipment, he shall attach an official notice, tag, lock or seal to such electrical equipment to prevent the use of electricity. No unauthorized person may attach such official notice, tag, lock or seal, or break open, change, remove, destroy, tear, alter, mutilate, cover or otherwise deface or injure any such official notice, tag, lock or seal.

222-20. Seizure of Electrical Equipment. The commissioner shall have the power and authority and is authorized to seize and take possession of any electrical equipment or materials or parts thereof or attachments therefor which in his opinion are dangerous to life or property or which are suspected or found by him to have been the cause of any fire, accident, injury or fatality, and to retain possession of the same for the purpose of making an investigation, examination or for official evidence. After such electrical equipment or material in the possession of the commissioner have served their purposes, and an official report and record thereof has been made, such electrical equipment or materials shall be returned to the owner, provided said owner requests in writing their return within 90 days from the date of their seizure. If no such request is made, such equipment or materials may be destroyed or disposed of.

222-21. Electrical Sign Switches. All electric signs shall have a disconnecting means mounted on the sign, or within 2 feet of the sign, to open all ungrounded conductors that supply the sign.

222-22. Wiring Portable Signs. 1. All portable signs that require electrical methods and materials shall be served by a 3-wire cord with equipment grounding conductor or plugged into a grounding receptacle on a circuit protected by an over-current device no larger than the rating of the circuit.

2. A ground fault circuit interrupter shall be installed at the source of supply when the distance between a portable sign and the outlet exceeds 10 feet in length or when the cord is placed on any driveway, parking area or access walks.

222-23. Low Voltage Decorative Lighting.

1. SCOPE. Low voltage decorative lighting systems consisting of approved conductors, fixtures, equipment and fittings may be installed, exposed or concealed in all buildings, except in unfinished basements and theaters.

2. USE. Low voltage decorative lighting systems may be installed under the following methods:

a. The maximum open circuit voltage shall be 15 volts A.C.

b. Current shall be from a U.L. approved Class-2 related transformer of 100 V.A. maximum.

c. Conductors shall be type N.M.C., nonmetallic sheathed cable, or where installed in raceways may be other approved types if within the 40% area.

d. These raceways need not terminate in a box or fitting as long as normal precautions are taken to protect the conductors against physical damage. The N.M.C. type of conductor shall be supported and secured by approved staples and straps which will not injure the cable. Cables shall be secured in place at intervals not to exceed 4-1/2 feet and within 12 inches from any cabinet, box or fitting, except that in concealed work in finished buildings or finished panels where such supporting is impracticable, the cables may be fished between points of access.

e. Lamp holders shall be approved for use and may be of the smaller than standard type.

f. Outlet boxes when used shall be standard approved type.

g. Fixtures shall be properly supported.

- h. Batteries shall not be used.
 - i. Circuits or equipment shall not be installed in hazardous locations, unless it complies with ch. Comm 16, Wis. Adm. Code.
 - j. Transformers shall be installed in accessible locations.
 - k. Grounding shall comply with ch. Comm 16, Wis. Adm. Code.
- 3. PERMITS AND INSPECTION.**
Permits, permit fees, and inspection shall be in conformity with ss. 222-5 and 222-13.

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SUBCHAPTER 2
ELEVATORS, DUMBWAITERS, ETC.

222-50. Scope. 1. Regulations contained in this subchapter with respect to elevators, power dumbwaiters, material handling elevators, moving walks and ramps, personnel hoists, and escalators are deemed supplemental to ch. Comm 18, Wis. Adm. Code. Plans required in subch II, ch. Comm 18, Wis. Adm. Code, shall be submitted to the commissioner of city development instead of the Wisconsin department of commerce together with 3 copies of the permit application.

222-51. Enforcement. 1. The commissioner or his duly authorized representative shall enforce the regulations of this subchapter.

2. It shall be the duty of the police and fire departments to assist the commissioner or any of his duly authorized representatives in the enforcement of this subchapter, and to permit and allow the commissioner or his representatives inside fire and police lines.

3. The commissioner or his duly authorized representative shall have the right and authority to start legal action to enforce the penalties of this code against any person who has violated any of the regulations of this subchapter.

4. The elevator inspector or inspectors and others duly authorized by the commissioner shall have the power and are authorized to enter any building or premises in the city except occupied dwellings without hindrance from anyone for the purpose of examining elevators or other devices regulated in this chapter and for the enforcement of this subchapter. The engineer or operator having charge of such equipment shall assist the commissioner or other duly authorized person or persons to such extent that he or they may be able to make careful and thorough investigation of every portion of the operating machinery, supports and enclosures connected with such equipment.

5. It shall be unlawful for any person to refuse lawful entry to the commissioner or his duly authorized representative, or to interfere with, harass, abuse, obstruct or cause delay in the performance of their duties.

222-52. Construction Permits. 1. PERMIT REQUIRED. Except as regulated in subs. 1 to 3 no person shall install, alter, repair or replace any elevator or other device regulated in s. Comm 18.1002, Wis. Adm. Code, without first

obtaining a permit therefor and paying the fees as prescribed in s. 200-33.

a. In cases of emergency the permit may be obtained within 72 hours from the time the work is started.

b. Where the extent and cost of the alteration, repair or replacement work is not known in advance, a minimum permit fee must be obtained and a supplemental fee paid after such cost has been determined.

2. APPLICATION FOR PERMIT. An application for permit shall be filed with the commissioner of city development on a form furnished for such purpose for each elevator, moving stairway (escalator), dumbwaiter or other device regulated in this subchapter. Such application shall describe the installation, alteration, repair or replacement work to be done and shall give the separate cost for each elevator, moving stairway (escalator), dumbwaiter or other device.

3. ISSUANCE OF PERMIT. The issuance of a permit for an elevator or other device regulated in this chapter shall not preclude compliance with all ordinances or other laws referring to occupancy and use or construction. No other work on the elevator or other device regulated in this chapter shall be done except work authorized by the permit and as shown on the approved plans (s. 222-53).

4. WORK WITHOUT PERMIT. Where any work is begun on the installation, alteration, repair or replacement of any elevator or other device regulated in s. Comm 18.1002, Wis. Adm. Code, without obtaining a permit as regulated in sub. 1, the commissioner shall have the power and authority to stop such work until a permit has been procured and quadruple fees paid as regulated in s. 200-32-3.

5. WITHHOLDING OF PERMITS.

a. Whenever any elevator installation occurs contrary to the regulations of this chapter, the commissioner shall issue an order to remedy the defective work to the violator at his or her last known address. Failure to comply with the order shall be deemed sufficient reason for withholding future permits, in addition to other penalties provided in this code.

b. The commissioner may also withhold future permits whenever an elevator contractor fails to:

b-1. Perform elevator work within a reasonable period of time after the issuance of a permit.

222-53 Electrical And Elevator Codes

b-2. Promptly respond to official communication from the commissioner.

222-53. Plans and Specifications. 1. At the time of a filing of an application for a construction permit the commissioner of city development shall require the manufacturer, owner, installer or user of any elevator or other device regulated in this subchapter to submit plans (drawings) in triplicate, data and specifications, schedules, or literature, information or tests as may be necessary to determine the fitness of equipment for the safe installation and use.

2. The approval of general building plans and specifications by the commissioner of city development shall not be considered as including approval of the installation of any elevator or other device regulated in this subchapter.

222-54. Safety Tests and Tags. A tag shall be fastened to the governor releasing carrier upon completion of a satisfactory test of the car safety device and speed governor. Reports of tests as specified in ch. Comm 18, Wis. Adm. Code, shall also be submitted to the department of city development.

222-55. Protection of Openings in Floors. 1. All openings in floors for the installation, enlargement, extension, alteration, repair or replacement of elevators or other equipment regulated by this chapter shall be protected as provided in ch. 252.

2. It shall be the responsibility of the person making such floor opening to provide and maintain the required protection until the work of installing, enlarging, extending, altering, repairing or replacing such elevator or other equipment is started.

3. Thereafter the person installing, enlarging, extending, altering, repairing or replacing such elevator or other equipment shall be responsible for maintaining the required protection until all of the work on the elevator or other equipment is completed.

222-56. Elevator-Electrical Installations by Licensed Contractor. 1. No person shall engage in electrical work in connection with elevators unless they are a bona fide employee of, and doing work for the holders of a Type E elevator electrical contractor license or a Type C electrical contractor license, and the

commissioner of city development has issued a valid permit for such work as provided in ss. 222-12 to 222-15.

2. All elevator electrical work shall be regulated by the provisions of this code.

222-57. Mechanical Brakes. Every existing drum type elevator machine equipped with a mechanical brake shall be provided with an electrical brake and direction stop and final limit switches at each terminal of travel.

222-58. Drains in Elevator Pits. In all elevator shaftways located on or below grade, a floor drain or sump pump shall be installed in accordance with ch. Comm 82, Wis. Adm. Code.

222-59. Door Interlock or Contact and Lock. All existing passenger elevators, except roped hydraulic elevators, shall be provided with an approved interlock or contact and lock on each hoistway entrance door or gate in the same manner as required by ch. Comm. 18, Wis. Adm. Code, as amended, for new elevators. All necessary requirements of emergency keys and keyways shall also be provided.

222-60. Gates and Doors. Every new or existing passenger elevator, except roped hydraulic elevators, shall be provided with a car gate or car door at each entrance to the car used for loading and unloading. Such gate or door shall be equipped with an approved electric contact which will prevent the car from running unless the car gate or door is in the closed position. Such electric contact shall be so located that it is not readily accessible from the inside of the car.

222-61. Freight Elevators. 1. Freight elevators shall not be permitted to carry passengers.

2. Each freight elevator shall contain a sign which reads: "THIS IS NOT A PASSENGER ELEVATOR. NO PERSON OTHER THAN A FREIGHT HANDLER IS PERMITTED TO RIDE ON THIS ELEVATOR." The sign shall be permanently and securely fastened in a conspicuous location within the car enclosure. The sign shall be of such material and construction that the letters stamped, etched, cast or otherwise applied to the face shall remain permanently and readily legible. The letters shall not be less than 1/2 inch (13 mm.) high.

**LEGISLATIVE HISTORY
CHAPTER 222**

Abbreviations:

am = amended
cr = created

ra = renumbered and amended
rc = repealed and recreated

rn = renumbered
rp = repealed

<u>Section</u>	<u>Action</u>	<u>File</u>	<u>Passed</u>	<u>Effective</u>
ch. 22	rn ch. 222	85-1396	12/20/85	1/1/86
222-01	cr	891008	10/10/89	10/28/89
222-01	am	961523	2/11/97	2/28/97
222-01	am	020467	8/1/2002	8/20/2002
222-02	rn from 222-01	891008	10/10/89	10/28/89
222-1-1	am	85-1396	12/20/85	1/1/86
222-1-2-c	am	951346	1/23/96	2/9/96
222-2	am	85-1396	12/20/85	1/1/86
222-3	am	85-1396	12/20/85	1/1/86
222-3	am	020593	11/8/2002	1/1/2003
222-4	am	85-1396	12/20/85	1/1/86
222-5	am	910636	8/2/91	8/21/91
222-6	am	020593	11/8/2002	1/1/2003
222-7	am	980963	12/18/98	1/1/99
222-7	am	020593	11/8/2002	1/1/2003
222-8	am	85-1396	12/20/85	1/1/86
222-8	am	980963	12/18/98	1/1/99
222-9	am	85-1396	12/20/85	1/1/86
222-10	am	85-1396	12/20/85	1/1/86
222-10	am	980963	12/18/98	1/1/99
222-11	rc	020593	11/8/2002	1/1/2003
222-11-1	rc	960203	6/4/96	6/21/96
222-11-2	rc	960203	6/4/96	6/21/96
222-11-2-c	am	85-1396	12/20/85	1/1/86
222-11-2-d	am	970910	10/14/97	10/31/97
222-11-2-g	rc	950061	5/16/95	6/3/95
222-11-2-h	am	950061	5/16/95	6/3/95
222-11-3-0	am	85-1396	12/20/85	1/1/86
222-11-3	rc	960203	6/4/96	6/21/96
222-11-3-c-1	am	86-675	7/29/86	8/16/86
222-11-3-c-1	am	961523	2/11/97	2/28/97
222-11-3-c-1	am	990863	10/19/99	11/5/99
222-11-3-c-3	am	85-1396	12/20/85	1/1/86
222-11-3-c-3	am	910636	8/2/91	8/21/91
222-11-3-d-1	am	86-675	7/29/86	8/16/86
222-11-3-d-1	am	961523	2/11/97	2/28/97
222-11-3-d-1	am	990863	10/19/99	11/5/99
222-11-3-d-2	am	85-1396	12/20/85	1/1/86
222-11-3-d-3	am	85-1396	12/20/85	1/1/86
222-11-3-e-1	am	86-675	7/29/86	8/16/86
222-11-3-e-1	am	961523	2/11/97	2/28/97
222-11-3-e-1	am	990863	10/19/99	11/5/99
222-11-3-e-2	am	85-1396	12/20/85	1/1/86
222-11-3-f-1	am	961523	2/11/97	2/28/97
222-11-3-f-1	am	990863	10/19/99	11/5/99

222- (History) Electrical And Elevator Codes

222-11-3-h	am	941414	1/24/95	2/10/95
222-11-3-i	am	85-1396	12/20/85	1/1/86
222-11-4	am	85-1396	12/20/85	1/1/86
222-11-5-e	cr	030080	6/3/2003	6/20/2003
222-11-6	rc	900835	10/16/90	11/2/90
222-11-6-0	am	85-1396	12/20/85	1/1/86
222-11-6-c	am	941414	1/24/95	2/10/95
222-11-7	am	030080	6/3/2003	6/20/2003
222-11-9	rc	030080	6/3/2003	6/20/2003
222-12	rp	020593	11/8/2002	1/1/2003
222-12-2-a	am	85-1396	12/20/85	1/1/86
222-12-2-b	rp	85-1396	12/20/85	1/1/86
222-12-2-d	am	980963	12/18/98	1/1/99
222-12-4-b	am	980963	12/18/98	1/1/99
222-12-4-c	am	980963	12/18/98	1/1/99
222-12-4-d	am	980963	12/18/98	1/1/99
222-13-1	am	911943	3/3/92	3/20/92
222-13-1	am	960762	9/24/96	10/11/96
222-13-2	am	980963	12/18/98	1/1/99
222-13-2-a	am	020593	11/8/2002	1/1/2003
222-13-3-a	am	980963	12/18/98	1/1/99
222-13-3-b	am	85-1396	12/20/85	1/1/86
222-13-3-b	am	921114	11/20/92	12/11/92
222-13-4	ra	901086	11/8/90	11/27/90
222-13-4	cr	901086	11/8/90	11/27/90
222-13-4-0	rc	911943	3/3/92	3/20/92
222-13-4-a	rc	911943	3/3/92	3/20/92
222-13-4-a	am	980963	12/18/98	1/1/99
222-13-4-b-0	am	911943	3/3/92	3/20/92
222-13-4-b-0	am	941414	1/24/95	2/10/95
222-13-4-b-2	am	941414	1/24/95	2/10/95
222-13-4-b-3	rp	911943	3/3/92	3/20/92
222-13-5	rn to 222-13-6	960762	9/24/96	10/11/96
222-13-5	cr	960762	9/24/96	10/11/96
222-13-5-a	am	980963	12/18/98	1/1/99
222-13-7	cr	960762	9/24/96	10/11/96
222-13-8	cr	960762	9/24/96	10/11/96
222-15-0	rp	891008	10/10/89	10/28/89
222-15-1	am	980963	12/18/98	1/1/99
222-15-2	am	85-1396	12/20/85	1/1/86
222-15-2	am	980963	12/18/98	1/1/99
222-16	am	980963	12/18/98	1/1/99
222-17-1	am	85-1396	12/20/85	1/1/86
222-17-3	am	980963	12/18/98	1/1/99
222-17-4	am	980963	12/18/98	1/1/99
222-19	am	85-1396	12/20/85	1/1/86
222-19-1	am	910636	8/2/91	8/21/91
222-19-1	am	921114	11/20/92	12/11/92
222-20	am	980963	12/18/98	1/1/99
222-22	am	85-1396	12/20/85	1/1/86
222-22	am	991763	5/14/2002	10/1/2002
222-22-1	am	871091	11/17/87	12/10/87
222-23-2-i	am	85-1396	12/20/85	1/1/86
222-23-2-i	am	961523	2/11/97	2/28/97
222-23-2-k	am	85-1396	12/20/85	1/1/86
222-23-2-k	am	961523	2/11/97	2/28/97
222-23-3	am	85-1396	12/20/85	1/1/86

Electrical And Elevator Codes 222- (HISTORY)

222-50	am	85-1396	12/20/85	1/1/86
222-50	rc	891008	10/10/89	10/28/89
222-50	am	961523	2/11/97	2/28/97
222-50	am	980963	12/18/98	1/1/99
222-51	am	980963	12/18/98	1/1/99
222-52-1-0	am	85-1396	12/20/85	1/1/86
222-52-1	am	990933	10/19/99	11/05/99
222-52-1	am	001458	2/27/2001	3/16/2001
222-52-1	am	040631	9/21/2004	10/8/2004
222-52-2	am	980963	12/18/98	1/1/99
222-52-3	am	85-1396	12/20/85	1/1/86
222-52-4	am	85-1396	12/20/85	1/1/86
222-52-4	am	980963	12/18/98	1/1/99
222-52-4	am	990933	10/19/99	11/5/99
222-52-4	am	040631	9/21/2004	10/8/2004
222-52-5	cr	980695	9/23/98	10/10/98
222-53	am	85-1396	12/20/85	1/1/86
222-53	am	980963	12/18/98	1/1/99
222-54	am	980963	12/18/98	1/1/99
222-54	am	001458	2/27/2001	3/16/2001
222-55	am	85-1396	12/20/85	1/1/86
222-56-1	am	85-1396	12/20/85	1/1/86
222-56-1	am	980963	12/18/98	1/1/99
222-58	am	85-1396	12/20/85	1/1/86
222-58	am	961523	2/11/97	2/28/97
222-58	am	970131	5/13/97	5/31/97
222-58	am	980695	9/23/98	10/10/98
222-59	am	970623	7/25/97	8/13/97
222-61	cr	930413	7/6/93	7/23/93

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